

	Form 1449 (Modified)		Atty Docket No.	Application No.:
	Information Disclosure Statement By Applicant		SRI1P044/US-4390-2	10/059,033
	(Use Several Sheets if Necessary)		Applicant:	
			Peirine, et al.	
		Filing Date	Group	
		01/29/02	2834	

### U.S. Patent Documents

Examiner Initial	No.	Patent No.	Date	Patentee	Class	Sub-class	Filing Date
TMB	A1	5,977,685	11/02/99	Kurita, et al.			06/03/96
TMB	A2	6,060,811	05/09/00	Fox, et al.			07/25/97
TMB	A3	6,184,608	02/06/01	Cabuz, et al.			12/29/98
TMB	A4	6,249,076	06/19/01	Madden, et al.			04/14/99
TMB	A5	4,885,783	12/05/89	Whitehead, et al.			04/10/87
TMB	A6	5,788,468	08/04/98	Dewa, et al.			11/03/94
TMB	A7	6,108,275	08/22/00	Hughes, et al.			12/16/97
TMB	A8	6,333,595B1	12/25/01	Horikawa, et al.			02/16/99
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TMB	A14	5,883,466	03/16/99	Suyama et al.			06/14/97
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TMB	A20	5,914,901	06/22/99	Gershenheld, et al.			06/22/99
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### Foreign Patent or Published Foreign Patent Application

Examiner Initial	No.	Document No.	Publication Date	Country or Patent Office	Class	Sub-class	Translation	
							Yes	No

### Other Documents

Examiner Initial	No.	Author, Title, Date, Place (e.g. Journal) of Publication
TMB	B1	Bar-Cohen, Yoseph, JPL, <i>WorldWide ElectroActive Polymers, EAP (Artificial Muscles) Newsletter</i> , Vol. 3, No.1, June 2001.
Examiner	Date Considered	
Thomas M. Dougherty	3/18/03	

Examiner: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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Information Disclosure  
Statement By Applicant

Applicant:

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## Other Documents

Examiner Initial	No.	Author, Title, Date, Place (e.g. Journal) of Publication
trms	C1	Bharti, V., Z.-Y. Cheng, S. Gross, T.-B. Xu, and Q. M. Zhang, "High electrostrictive strain under high mechanical stress in electron-irradiated poly(vinylidene fluoride-trifluoroethylene) copolymer," <i>Appl. Phys. Lett.</i> Vol. 75, 2653-2655 (October 25, 1999).
trms	C2	Bharti, V., H. S. Xu, G. Shanthi, and Q. M. Zhang, "Polarization and Structural Properties of High Energy Electron Irradiated Poly(vinylidene fluoride-trifluoroethylene) Copolymer Films," to be published in <i>J. Appl. Phys.</i> (2000).
trms	C3	Calvert, P. and Z. Liu, "Electrically stimulated bilayer hydrogels as muscles," Proceedings of the SPIE International Symposium on Smart Structures and Materials: Electro-Active Polymer Actuators and Devices, March 1-2, 1999, Newport Beach, California, USA, pp. 236-241.
trms	C4	Kornbluh, R., Pelrine, R., Eckerie, J., Joseph, J., "Electrostrictive Polymer Artificial Muscle Actuators", IEEE International Conference on Robotics and Automation, Leuven, Belgium, 1998
trms	C5	Kornbluh, R., R. Pelrine, Jose Joseph, Richard Heydt, Qibing Pei, Seiki Chiba, 1999. "High-Field Electrostriction Of Elastomeric Polymer Dielectrics For Actuation", Proceedings of the SPIE International Symposium on Smart Structures and Materials: Electro-Active Polymer Actuators and Devices, March 1-2, 1999, Newport Beach, California, USA. pp. 149-161.
trms	C6	Kornbluh, R., R. Pelrine, Q. Pei, S. Oh, and J. Joseph, 2000. "Ultrahigh Strain Response of Field-Actuated Elastomeric Polymers," Proceedings of the 7th SPIE Symposium on Smart Structures and Materials-Electroactive Polymers and Devices (EAPAD) Conference, March 6-8, 2000, Newport Beach, California, USA, pp. 51-64.
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Examiner Initial	No.	Author, Title, Date, Place (e.g. Journal) of Publication
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MP	D2	Pelrine et al., "Electroactive Polymer Electrodes", U.S. Patent Application No. 09/619,843, filed July 20, 2000, 54 pages
MP	D3	Pelrine, R., R. Kornbluh, and J. Joseph, "Electrostriction of Polymer Dielectrics with Compliant Electrodes as a Means of Actuation," <i>Sensors and Actuators A: Physical</i> , Vol. 64, 1998, pp.77-85.
LMP	D4	Pelrine, R., R. Kornbluh, J. Joseph, and S. Chiba, "Electrostriction of Polymer Films for Microactuators," <i>Proc. IEEE Tenth Annual International Workshop on Micro Electro Mechanical Systems</i> , Nagoya, Japan, January 26-30, 1997, pp. 238-243.
MP	D5	Pelrine, R., R. Kornbluh, and J. Joseph, FY 1998 <i>Final Report on Artificial Muscle for Small Robots</i> , ITAD-3482-FR-99-36, SRI International, Menlo Park, California, 1999
MP	D6	Pelrine, R., R. Kornbluh, and J. Joseph, FY 1999 <i>Final Report on Artificial Muscle for Small Robots</i> , ITAD-10162-FR-00-27, SRI International, Menlo Park, California, 2000
LMP	D7	Pelrine, R., R. Kornbluh, Q. Pei, and J. Joseph, "High Speed Electrically Actuated Elastomers with Over 100% Strain," <i>Science</i> , Vol. 287, No. 5454, pages 1-21, 2000
LMP	D8	Pelrine, R., J. Eckerle, and S. Chiba, "Review of Artificial Muscle Approaches," invited paper, in <i>Proc. Third International Symposium on Micro Machine and Human Science</i> , Nagoya, Japan, October 14-16, 1992
LMP	D9	Shahinpoor, M., "Micro-electro-mechanics of Ionic Polymer Gels as Electrically Controllable Artificial Muscles," <i>J. Intelligent Material Systems and Structures</i> , Vol. 6, pp. 307-314, May 1995
MP	D10	Zhang, Q., V. Bharti, and X. Zhao, "Giant Electrostriction and Relaxor Ferroelectric Behavior in Electron-irradiated Poly(vinylidene fluoride-trifluoroethylene) Copolymer," <i>Science</i> , Vol. 280, pp. 2101-2104 (26 June 1998).
Examiner	Date Considered	
<i>Thomas D. DeGroot</i>	<i>3/16/03</i>	

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